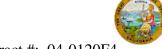
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-005859

Address: 333 Burma Road **Date Inspected:** 25-Mar-2009

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1830 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: ZPMC and ABF **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** SAS tower

Summary of Items Observed:

Bay #10 South and North Tower Shop

North tower lift#1:- Caltrans QA Inspector observed four welders performed FCAW build up weld metal welding on stiffeners which located at exterior bottom tower of skin plate C and D. The buildup metal welding has been approved by Caltrans with file #CWR-00087. The metal buildup on skin plate C is 50mm to 60mm thick and skin plate D is 25mm to 30mm thick. The SMAW was monitored and recorded by ZPMC and ABF QC inspector. Base on Caltrans observation, no discrepancies were noted.

North tower lift#1:- Caltrans QA Inspector observed two welders performed SMAW process on inner corner longitudinal seam weld that connected skin plate C to D and skin plate D to E. The weld number is NDS1-A112B/H-2A and NSD1-A112B/H-1B. The welding located at elevation 15m to 18m. The minimum preheat and maximum interpass temperature requirements for SMAW longitudinal seam weld are 110C degree and 230 C degree. The SMAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

South Tower Lift #1:-Caltrans QA Inspector observed three welders performed FCAW repair process on inner corner longitudinal seam weld that connected skin plate C and D. and the weld number is SSD1-A111B/H-124, 91 and 242. All the excavated weld areas have been MT test prior repair welding. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA inspector observations, no discrepancies were noted.

Bay #11 East and West Tower Shop

West Tower Lift #1:-Caltrans QA Inspector observed four welders performed SMAW root pass process on interior diaphragm that attached to skin plate A. The interior diaphragm located at elevation 23m, 28m, 33m and 38m. The

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

SMAW root pass welding was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

East tower lift #1:- Caltrans QA inspector performed final VT inspection on the connection web plate welds and diaphragm welds of skin plate D. Those weld connected to diaphragms, stiffeners and skin plate D. The connection web plate welds and diaphragm welds located at elevation 18m, 23m, 28m, 33m, 38m, 43m and 47.6m. All the welds have been VT accepted by ZPMC and ABF QC prior Caltrans QA inspection. Base on Caltrans inspection, the diaphragm welds appeared to be in compliance with requirements of AWS D1.5 2002 and Caltrans contract documents.

Summary of Conversations:

As noted within the report above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact, who represents the Office of Structural Materials for your project.

Inspected By:	Pau,Wai	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer